

Application No. 09/360,199

September 10, 2002

Proposed claims for consideration

x. (based on currently pending claim 1) A method for delivery of a pharmaceutical composition to gastrointestinal or genitourinary cells in a recipient in need thereof which comprises

(a) contacting the intended site of delivery of said pharmaceutical composition with an agent adequate to cause a temporary disruption of the mucosal lining covering said gastrointestinal or genitourinary cells; and

(b) concurrently or subsequent to said contacting of step (a), contacting said gastrointestinal or genitourinary cells with said pharmaceutical composition, wherein said pharmaceutical composition comprises an [a nucleic acid or a cell comprising a nucleic acid, the expression of which is desired in said gastrointestinal or genitourinary cells] adenoviral vector comprising a nucleic acid encoding an antigen; whereby [said method] expression of said antigen induces an immune response in said recipient specific to [the gene product encoded by said nucleic acid] said antigen.

y. The method of claim x, wherein said antigens are selected from the group consisting of tumour antigens, viral antigens, bacterial antigens and mycoplasma antigens.

z. The method of claim y, wherein said antigens are viral antigens, bacterial antigens and mycoplasma antigens derived from microbes that cause diseases in the gastrointestinal or genitourinary tracts.

a. The method of claim z, wherein said method vaccinates said recipient such that the onset of infection by viral, bacterial, or mycoplasmic pathogens is inhibited upon challenge to recipient by said pathogens.

- b. The method of claim a, wherein said method vaccinates said recipient against sexually transmitted diseases.
- c. The method of claim y, wherein said method increases protection against intestinal tumours.